Note :

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1. Introduction

We live up to the promise of Thermaltake logo in our unending quest for excellence.
Shall you have any suggestion or comments, please access our web site :
http://www.thermaltake.com
or e-mail to :
thermaltake@thermaltake.com
we appreciate your kindly feedback and you will receive the prompt response from our customer service team.

Thank you for choosing a quality Thermaltake ***Purepower 500W*** PC Power Supply. We trust that you will find it providing you with many years of service.

You can always find a Thermaltake ***Purepower 500W*** PC Power Supply that is suitable for all of your modern PC power needs.

Please take the time in familiarize yourself with the power supply, its connectors and the contents of this manual before proceeding with the installation of the power unit. You will need a Phillips crosshead screwdriver, perhaps your PC case manual and most certainly your motherboard manual.

4. Trouble shooting

Condition 1: No DC output. The fan or fans are motionless
Check:
1-1 Is the AC inlet plug firmly plugged into the PSU inlet socket?
1-2 Is the wall socket, extension power cord, power strip or surge protector in use, fully functional and wall power switch turned 'ON'?
1-3 Is the Main Board socket (24pin) plug fully and firmly inserted?

Condition 2: The fan or fans began rotating and then stopped. The system hangs without proceeding any further.
Check:
2-1 Are the peripheral connectors firmly plugged into accessory devices, such as the main hard drive, CD ROM , etc?
2-2 If a plug has been inadvertently connected in an off-set or reversed position, unplug the AC power source, reconnect the offending connectors and then wait for 30 seconds before replug in the AC power source and try again.

Note:
If the power supply still cannot or is still unable to power up after following the above instruction, please send the unit back to your dealer or retailer for after sales service.

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➤ Technology Features

12 cm Fan -High thermal performance

New 24(20) pin Main Connector

Dual +12V Rails

6 pin PCI-Express Connector

5-pin S-ATA Connector

Mirror Coating

➤ Cable Application

Intelligent Cable Management:
>Black cable sleeving
>Optimum air-flow

➤ Total Output Connector

24-pin Main Connector

4-pin +12V Power Connector

4-pin Peripheral Power Connector

4-pin Floppy Drive Connector

5-pin S-ATA Connector

6-pin PCI Express Connector

OUTPUT						
	+3.3 V	+5 V	+12 V 1	+12 V 2	-12 V	+5 VSB
Max. Load	22 A	32 A	14 A	15 A	0.3 A	2 A
Min. Load	0.5 A	0.5 A	1.0 A	1.0 A	0.0 A	0.0 A
Load Reg.	+5% ~ -5%	+5% ~ -5%	+5% ~ -5%	+5% ~ -5%	+10% ~ -10%	+5% ~ -5%
Ripple V(p-p)	50 mV	50 mV	100 mV	100 mV	150 mV	50 mV

Should you have any questions regarding the aforementioned steps, please contact Thermaltake directly. Failure to follow the proper procedures may cause sever bodily harm or PC component damage.

For Support or General Inquiries, please contact us at:

❶ Thermaltake Technology USA
Toll Free: (800)988-1088
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❺ Thermaltake Japan Inc.
Email: *sales-jp@thermaltake.co.jp*

2 Installation

2.1 Usage illustration

2.1.1 Do not pull the AC power cord when the power supply is in use or else damage to components will result.

2.1.2 Do not store the Power Supply in a high humidity and high temperature environment.

2.1.3 When using an ATX type power supply under testing conditions where the power supply unit is not installed in a PC with its components, please follow the steps below:

1)Please take a paper clip and untwist it.
2)Make sure the power supply unit is in the "OFF" position.
3)Locate the 20 or 24 pin motherboard connector from the power supply unit.
4)Plug one side of the paper clip into the green wire hole.
5)Plug the other side of the paper clip into any of the black wire holes.
6)Turn on the PSU to see if the power supply fans turn on.

2.1.4 High voltages exist in the power supply. Do not open the power supply case unless you are an authorized service technician or electrician.

2.1.5 All warrantees and guarantees shall be voided should there be a failure to comply with any of the warnings and cautions covered in this manual.

3.2 Purepower 500W PSU Specification

Features:

-Complies with ATX 12V 2.0 Version.
-Supports 6-pin PCI-Express, 4 S-ATA, and 20+4 pin connector.
-PFC function, improved energy efficiency and reduced current load on AC delivery systems.
-Low noise 12cm fan and mirror effect housing.
-Protections against Input Protection, Over Power, Over Voltage, Short-Circuit, and No Load Operation.
-Safety / EMI Approvals: UL, CUL, TUV, FCC, and CB certification.

12cm Fan Design - Optimum Air flow and Lowe Noise

SPECIFICATION	
P/N	W0100
Maximum Power	500 Watts
Color	Black
Switches	ATX Logic on off additional power rocker switch(115/230 V selector switch)
PFC (Power Factor Correction)	*N/A*
Cooling System	One 12cm Fan: SPEED : 2400 RPM(+/-10%) DIMENSION : 120 x 120x 25 mm TEMP. AUTOCONTROL 1525 rpm at 28.6C~2393 rpm at 64.8C
Noise	17dB at 1300 RPM
P. G. Signal	100-500 ms
Over Voltage Protection Recycle AC to Reset	+5V output 6.25□0.75V +3.3V output 4.0□0.30V +12V output 15.0□0.6V
DIMENSIONS	
Unit Size	14cm(L)x15cm(W)x8.6cm(H)
Net Weight	1.68 kg
INPUT	
Input Voltage	115 VAC / 230 VAC
Input Frequency Range	47 ~ 63 Hz
Input Current	9.0A / 5.0A
Hold-up Time	8ms(minimum) at 80%
Efficiency	> 70%

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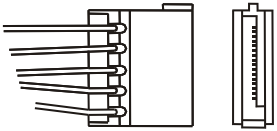
Serial ATA Power Connector



Color	Signal	Pin
Yellow	+12V₁DC	1
Black	COM	2
Red	+5VDC	3
Black	COM	4
Orange	+3.3VDC	5

2.2 Installation steps

To prevent electrical shocks, please disconnect the power cord from your existing power supply unit. ***Purepower 500W*** PSU has Voltage Selector which will change to 115V / 230V.

Installation Steps

2.2.1 Disconnect the power cord from your old power supply.
2.2.2 Follow your computer case manual and disassemble the case.
2.2.3 Disconnect all the power connectors from the motherboard and from the peripheral devices such as case fans, hard drives, floppy drives. etc.
2.2.4 Remove the existing power supply from your computer case and replace it with your new Thermaltake ***Purepower 500W*** PSU.
2.2.5 Connect the power connectors to the motherboard and peripheral devices (refer to the rest of this manual to match the various one-way key-locked connectors to the motherboard and accessories).
2.2.6 Connect the 6-pin PCI Express connector to PCI Express graphic card if you need.

Note: Please read the user manual supplied with your graphic card for detail usage instructions.

2.2.7 Close the computer case.
2.2.8 Make sure your power supply switch is on "OFF" position, and Connect the supplied power cord to your Thermaltake ***Purepower 500W*** PSU.

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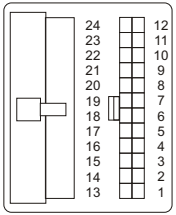
3. Product Specification

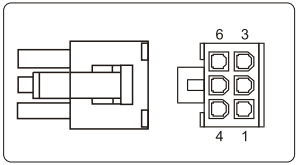
3.1 Output specification

Main Power Connector



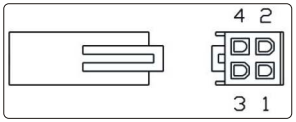
Voltage	Color			Color	Voltage
+3.3 V	Orange	1	13	Orange	+3.3 V
+3.3 V	Orange	2	14	Blue	-12 V
COM	Black	3	15	Black	COM
+5 V	Red	4	16	Green	PS_ON#
COM	Black	5	17	Black	COM
+5 V	Red	6	18	Black	COM
COM	Black	7	19	Black	COM
PWR_ON	Gray	8	20	N/C	N/C
+5 Vsb	Purple	9	21	Red	+5 V
+12 V_1	Yellow	10	22	Red	+5 V
+12 V_1	Yellow	11	23	Red	+5 V
+3.3 V	Orange	12	24	Black	COM

PCI Express connector (6 pin)



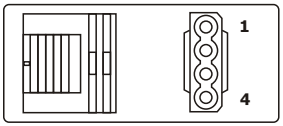
Color	Signal	Pin
Yellow	12V_1DC	1
Yellow	12V_1DC	2
Yellow	12V_1DC	3
Black	COM	4
Black	COM	5
Black	COM	6

+12V connector (4 pin)



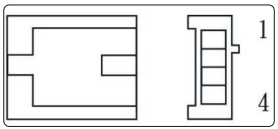
Color	Signal	Pin
Black	COM	1
Black	COM	2
Yellow	+12V_2DC	3
Yellow	+12V_2DC	4

Peripheral connector (4 pin)



Color	Signal	Pin
Yellow	+12V_1DC	1
Black	COM	2
Black	COM	3
Red	+5VDC	4

Floppy disk connector (4 pin)



Color	Signal	Pin
Red	+5VDC	1
Black	COM	2
Black	COM	3
Yellow	+12V_1DC	4

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